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*Lightning*

# HOLOPHANES

GEO A MACBETH COMPANY

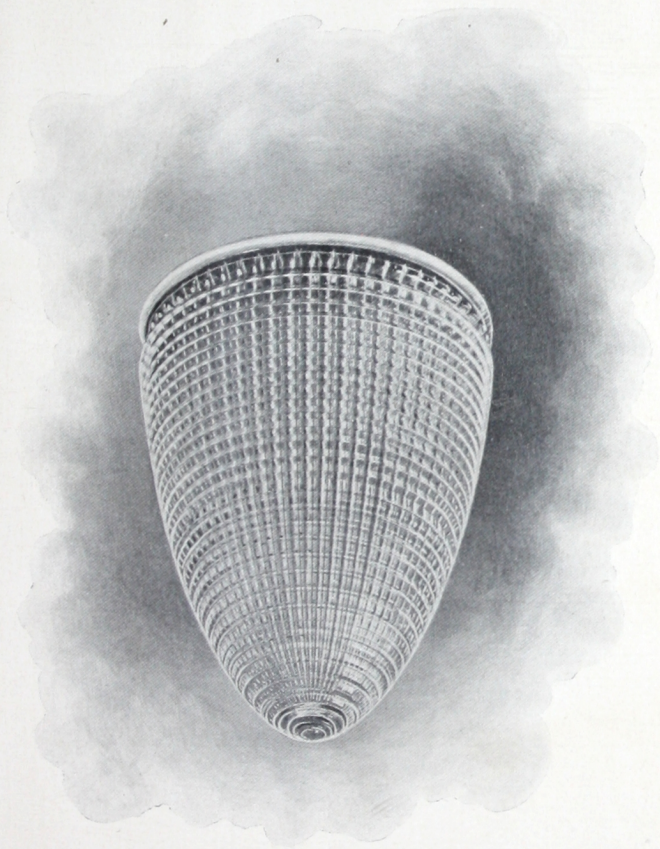
PITTSBURGH, PENN'A

ROOMS 311 TO 316 TELEPHONE BUILDING





# HOLOPHANES



GEO A MACBETH COMPANY, MAKERS

PITTSBURGH, PENN'A

ROOMS 311 TO 316 TELEPHONE BUILDING





**H**OLOPHANES, a trade mark, meaning wholly luminous. An entirely new and ingenious method of illumination, directing the rays of light as they come from incandescent lamps—arc lights—Welsbach mantles—carbon oil flames, flat or argand gas flames, so as to obtain not only the best, but most pleasant results.

The various uses require a variety of shapes and sizes of each shape, for sometimes the light is required in a downward direction, other times in a horizontal direction, or both; we are preparing all kinds as fast as can be done.

Wherever the rays of light are required and directed by the Holophane, a peculiar and uniform light is projected *without lines*, i. e., entire absence of light alternated with dark streaks, and no shadow underneath; the source of light and fixture inside, such as burners and electric lamps, are hidden, and only the luminous surface or Holophane can be seen.

This luminous surface is not produced by any opaqueness, roughness of surface, or other light absorber or destroyer, but by known laws of optics now first methodically and carefully applied. The remark has been made, "We know how to produce intensely bright lights—now we have found a way to direct the rays of them."

The intensity of the highly luminous rays from small balls of fire are subdued and made visible only from the increased surface illuminated, as instances, the 12-inch Holophane for street or public building lighting (arc system) the highly luminous carbon is *not seen*, but a luminous body 12 inches diameter, the size of the Holophane, without the shadow or dark place underneath.

Also in the 7 inch, 9 inch and 11 inch Holophanes, spherical shape, the incandescent wire of electric lamps cannot be seen. The serious effect of intensely bright lights on the eyes is mitigated—we get the light but are not blinded.

## FOR CEILING LIGHTING.

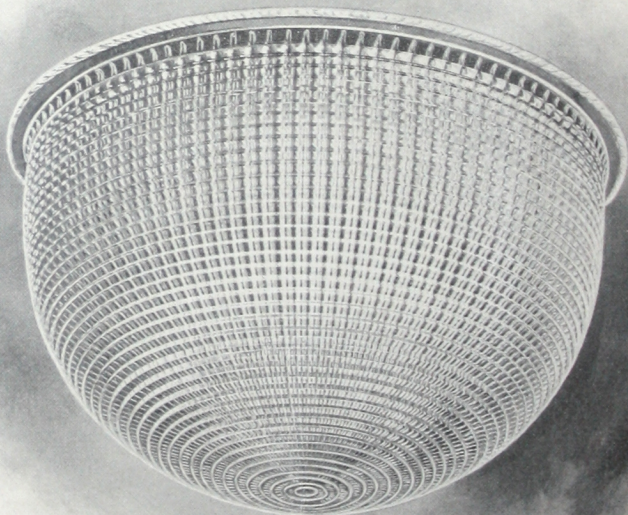
We have ready now "Holophanes" cone-shaped for incandescent lamps, to fit 4 inch holder, (see cut on front page), to hang at an angle of 45 degrees; others for vertical positions, either up or down. Also,

Holophanes, bowl-shaped for ceiling lighting, 9 in. diameter.

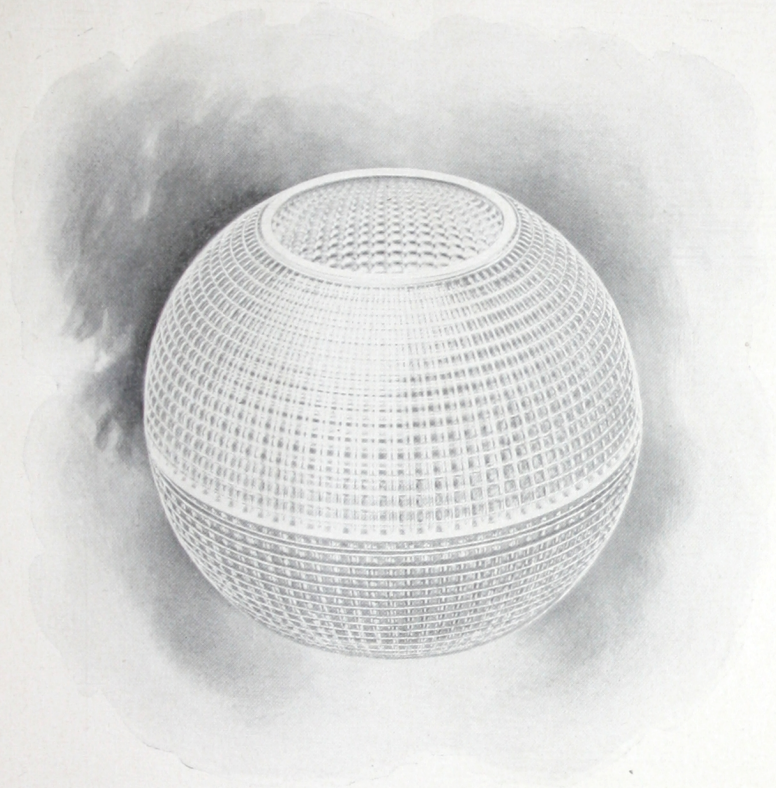
"	"	"	"	"	11	"
"	"	"	"	"	13½	"

The ideal of perfect lighting—pleasant and economical, no need of chandelier—if not wanted.

Combinations can be formed by using small cone-shaped Holophanes with larger bowl-shaped ones—forming clusters far exceeding in brilliancy and uniformity of light any system ever attempted.







Holophane—spherical shape for suspending—(the smaller sizes can be supported by the electric wire and can be placed high or low).

7 inches diameter.	11 inches diameter.
9    "    "	13½    "    "

Holophanes, flared shape for gas (4 inch holder) or incandescent lamps standing upright.

Holophane for carbon oil lamps of the central draft kind, such as Rochester, B. & H. and others.

We invite an inspection of all the above (illuminated) at our office in the Telephone Building.

GEO A MACBETH COMPANY.